



Memorandum

TO: PLANNING COMMISSION

FROM: Stephen M. Haase

SUBJECT: SEE BELOW

DATE: August 20, 2003

Council District: Citywide
SNI Areas: All

SUBJECT: PROPOSED ORDINANCE AMENDING TITLE 20, THE ZONING CODE, TO MODIFY AND ADD PROVISIONS RELATED TO STORM WATER RUNOFF MANAGEMENT AND POST-CONSTRUCTION STORM WATER QUALITY CONTROL

RECOMMENDATION

Planning staff recommends that the Planning Commission forward to the City Council a recommendation to approve an ordinance amending Title 20 of the San Jose Municipal Code (the Zoning Code), to implement additional requirements for storm water management and post-construction storm water quality control.

BACKGROUND

The San Francisco Bay Regional Water Quality Control Board (Regional Board) issues National Pollutant Discharge Elimination System (NPDES) permits that stipulate water quality requirements for discharges to waters of San Francisco Bay and its tributaries. In October 2001, the Regional Board issued a revised NPDES Municipal Separate Storm Sewer System (MS4) Permit to the City of San Jose and 14 other local jurisdictions ("Co-permittees"). The other Co-permittees include the County of Santa Clara, twelve other municipalities in the County, and the Santa Clara Valley Water District. These Co-permittees are also referred to as the Dischargers. Together, the Co-permittees constitute the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP).

The revised NPDES MS4 Permit (the Permit) includes new storm water runoff requirements for projects on undeveloped or previously developed sites (see Attachment 2). The Permit establishes two new types of requirements for new and redevelopment projects: pollutant control measures and peak flow control measures. The Permit allows the City to implement the requirements in phases.

On October 15, 2003, the City must begin implementing specific pollutant control requirements for Group 1 Projects, which are defined as new development or Significant Redevelopment that results in an addition or replacement of a combined total area of one acre or more of impervious

surface (i.e., any surface that cannot be effectively or easily penetrated by water, including pavement, roofs, compacted soils, and rock outcrops).

For Group 1 Projects, the City of San Jose and the other Co-permittees are required to modify their land development project approval processes to require applicants to incorporate appropriate site design principles, source control measures, and structural storm water treatment controls into their projects to reduce pollutant discharges from storm water runoff to the maximum extent practicable.

On April 15, 2005, the City and other Co-Permittees must begin addressing a second category of projects, which the Permit identifies as Group 2 Projects. The Group 2 default size is 5,000 square feet, but the Permit allows SCVURPPP to propose an alternative Group 2 Project definition. Based on permits that the Regional Board has recently approved for other storm water programs in the Bay Area, the alternative project definition could be at least 10,000 square feet in size and could exclude individual lot single-family residential development from the Permit requirements.

ANALYSIS

The proposed ordinance includes modifications to existing provisions as well as new provisions to Title 20 (the Zoning Code) intended to maintain consistency with the revised NPDES MS4 Permit provisions that go into effect on October 15, 2003. As Permit requirements are further phased in, staff may propose additional ordinances to amend the San Jose Municipal Code.

In order to implement the first phase of new requirements, staff proposes to amend Title 20 as follows:

1. Require a development permit or permit adjustment for the creation, addition or replacement of impervious surface on a site not used solely for one single-family residence.
2. Require the site design of projects subject to a development permit to conform to the City's policies on post-construction storm water quality. Revision of the City's policies is underway for City Council consideration in order to implement Permit requirements. The Post Construction Urban Runoff Management Policy (Attachment 3) is scheduled for Council hearing on September 23, 2003.
3. Require approval of a Special Use Permit, and recordation of an easement where the required storm water treatment is provided off-site.

Reduction of Storm Water Pollution

Through the City's discretionary land use review process, projects are required to reduce storm water pollution through a combination of site design, source control, and treatment best management practices (BMPs). A BMP is defined as a method, activity, maintenance procedure

or other practice for reducing the amount of pollution entering a water body. These requirements are currently stated in the City's General Plan policies, the City Council Policy on Post Construction Urban Runoff Management, and other City policy documents related to post-construction storm water quality control; and are implemented as conditions of approval in development permits with the following characteristics:

1. **Site Design BMPs:** Site design BMPs that reduce storm water pollution are based on the concept of minimizing impervious surface coverage on the site, thereby reducing the overall volume and velocity of storm water runoff, and maximizing opportunities for infiltration of rainfall. The strategy is to reduce the amount of impervious surface area that is directly connected to storm drain systems through the use of landscaping and preservation of pervious open space. This step should happen at the beginning of the development process, because reducing the overall amount of runoff reduces the volume of runoff to be treated using on-site storm water runoff treatment BMPs. Examples of appropriate site design techniques suggested in the Permit include:
 - a. Building design features such as disconnected roof downspouts leading to splash blocks or "bubble-ups."
 - b. Alternate driveway standards (e.g., wheelways, unit pavers, or other pervious pavements).
 - c. Microdetention, including storm water detention areas in landscaping, and use of cisterns.
 - d. Preservation of high-quality open space.
 - e. Maintenance and/or restoration of riparian areas and wetlands as project amenities, including establishing vegetated buffer zones to reduce runoff into waterways, allow for stream channel change as a stream's contributing watershed urbanizes, and otherwise mitigate the effects of urban runoff on waters and beneficial uses of waters.
 - f. Landscape-based measures or other features to reduce the velocity of, detain, and/or infiltrate storm water runoff.

Planning staff reviews the opportunities for utilizing these site design techniques during the project review process. The City's design guidelines are consistent with, and reinforce these principles.

2. **Source Control BMPs:** Source control BMPs are features that prevent pollutants that may be present on a developed site from entering storm water runoff. These measures also reduce the overall volume of runoff to be treated using on-site storm water runoff treatment BMPs. Examples suggested in the Permit include:
 - a. Indoor mat/equipment wash racks for restaurants, or covered outdoor wash racks plumbed to the sanitary sewer.

- b. Covered trash and food compactor enclosures with a sanitary sewer connection for dumpster drips and designed such that run-on to trash enclosure areas is avoided.
 - c. Sanitary sewer drains for swimming pools.
 - d. Sanitary drained outdoor covered wash areas for vehicles, equipment, and accessories.
 - e. Sanitary sewer drain connections to take fire sprinkler test water.
 - f. Storm drain system stenciling.
 - g. Landscaping that minimizes irrigation and runoff, promotes surface infiltration where appropriate, minimizes the use of pesticides and fertilizers, and where feasible removes pollutants from storm water runoff.
 - h. Appropriate covers, drains, and storage precautions for outdoor material storage areas, loading docks, repair/maintenance bays, and fueling areas.
3. **Treatment BMPs:** Treatment BMPs are structural features that treat storm water runoff, using settlement, infiltration, bioremediation, or filtration to remove pollutants that have accumulated as the runoff flows across a developed site. Examples include:
- a. *Inlet Filters*, which are devices that are inserted into storm drain inlets that are held in place by the iron grate on the inlets. Typically, trash and sediment from storm water runoff accumulate in an internal basket, while oil and grease are captured or soaked up in absorbent or filtration media before entering the storm drain system.
 - b. *Vegetated swales*, which are broad, shallow channels with a dense stand of vegetation covering the side slopes and bottom, designed to trap suspended solids and trace metals, promote infiltration, and reduce the flow velocity of storm water runoff.
 - c. *Extended detention basins*, which are basins whose outlets have been designed to detain the storm water runoff from a water quality design storm for some minimum period of time (e.g., 48 hours) to allow particles and associated pollutants to settle to the bottom. They can also be used to provide flood control by sizing them to accommodate additional flood detention storage.
 - d. *Hydrodynamic separators*, which are underground flow-through structures with a settling or separation unit to remove sediments and other pollutants.

Numeric Sizing of Storm Water Treatment BMPs

The NPDES MS4 Permit requires that the City begin implementing specific hydraulic design calculation methods for storm water BMPs, in lieu of the more qualitative approach that the City now uses. These hydraulic design methods are either volume or flow-based, depending on the type of treatment BMP proposed. For example, treatment BMPs that rely on storm water volume capacity such as detention/retention facilities or infiltration structures would be sized using the volume-based methods. Treatment BMPs that rely on flow capacity such as swales, sand filters or wetlands would be sized in accordance with the flow-based methods. The specific calculation method options, which are based on percentages of runoff and rainfall events, are stated in Provision C.3.d (i and ii) of the Permit (see attached).

Waiver of Treatment BMP Requirements

The Permit allows the City to adopt a waiver process as part of its implementation of the numeric sizing requirements. A waiver is allowed where meeting the sizing criteria is impracticable, and the project either provides other water quality benefits or alternative treatment of an equivalent pollutant loading or quantity of storm water runoff. The City would specifically define the basis for impracticability or infeasibility, which may include situations where treatment is technically feasible, but excessively costly, as determined by set criteria. The Permit also states that the waiver program may allow a project to participate in a regional or watershed storm water treatment facility, without a showing of impracticability on the individual project site, if the regional or watershed storm water treatment facility discharges into the same receiving water, where feasible.

Off-Site Runoff Treatment

By requiring a Special Use Permit for Off-Site Storm Water Runoff Treatment, the proposed ordinance would provide a land use approval process for storm water runoff treatment or an equivalent water quality benefit provided on a lot other than the lot occupied by the building or use for which the treatment is required.

An applicant for a Special Use Permit for Off-Site Storm Water Runoff Treatment would have to design the treatment control or BMP in conformance with current City policies related to post-construction storm water quality, and would be required to provide a covenant of easement for ingress/egress, operation, and maintenance purposes. The applicant would also be responsible for operating and maintaining the Off-Site Storm Water Runoff Treatment in accordance with conditions spelled out in the Special Use Permit.

Post Construction Urban Runoff Management Policy

The City Council Policy on Post Construction Urban Runoff Management provides a framework to incorporate a minimum level of specific measures into major development projects that will

reduce storm water pollutants entering creeks, rivers and the Bay. In order to maintain consistency with the Permit and to establish waiver program criteria including eligibility for off-site storm water runoff treatment, Planning staff is proposing revisions to the City Council Policy on Post Construction Urban Runoff Management. These revisions are expected to be considered by Council concurrently with the proposed ordinance on September 23, 2003.

Operation and Maintenance of Storm Water Treatment BMPs

The Permit also stipulates the operation and maintenance of storm water treatment BMPs , which may be subject to verification by the City. In order to comply with this Permit requirement, future ordinance(s) amending the San Jose Municipal Code may be proposed by City staff, as needed.

Hydrograph Modification Management Plan (HMP)

The Permit also requires the Co-permittees, including the City of San Jose, to develop a Hydrograph Modification Management Plan (HMP), to control not only the pollutants from development but runoff volumes as well, where the increased storm water discharge rates and/or duration would result in increased potential for erosion or other adverse impacts to beneficial uses of local waterways, attributable to changes in the amount and timing of runoff. The HMP, which is currently being developed by SCVURPPP, is scheduled to be submitted by the Co-permittees as a group to the Regional Board by January 15, 2004. After approval by the Regional Board, Co-permittees are required to implement the HMP, and City staff may propose additional ordinances to amend the San Jose Municipal Code in order to maintain consistency with the HMP requirements.

PUBLIC OUTREACH

On July 9, 2003 Planning staff sent a hearing notice for the proposed ordinance by e-mail to developers, consultants, engineers, representatives of environmental groups, and other stakeholder groups.

Additional outreach consisted of posting the availability of the hearing notice on the Planning Divisions' web page and e-mailing the web page address to Bay Area-wide representatives of stakeholder groups on July 10, 2003. The public hearing notice for both the Planning Commission and City Council was published in the Post Record.

City staff, in coordination with the other Co-permittees in SCVURPPP, has prepared guidance documents and sponsored regional training workshops for the public. Planning staff has also prepared informational fact sheets on the new regulations that have been distributed at the Planning Divisions' Developers Roundtable meetings and have been available at the Planning Divisions' public information counter and web page since last year and this July respectively.

On July 31, 2003 Planning staff received a letter from Myron Crawford of Berg & Berg Developers, Inc. (Attachment 4) in opposition to the implementation of the Permit Amendment from the Regional Board. Mr. Crawford's concerns include onerous costs to developers to implement the Regional Board requirements, lack of demonstration that the potential environmental benefits justify the costs, unintended consequences for development, an unreasonably short implementation schedule, and poorly crafted and unnecessary requirements.

The City of San Jose has received Council direction to implement the Regional Board's Permit Order. Approval of the proposed Title 20 amendment would facilitate this implementation by clarifying the authority the City has to review development applications. The Title 20 amendment would also establish an approval process to facilitate the provision of off-site treatment of storm water runoff as a method for achieving compliance with the Regional Board's Permit requirements. In addition, the proposed revisions to the City Council Policy on Post Construction Runoff include options for applicants to provide equivalent water quality benefits if onsite treatment is not feasible. Furthermore, to help applicants comply with the new requirements, Planning staff will continue to provide guidance to developers and other stakeholders.

COORDINATION

Preparation of the proposed ordinance has been coordinated with the Environmental Services Department, the Redevelopment Agency, and the City Attorney's Office.

CEQA

The environmental impacts of the proposed ordinance, public project File No. PP 03-07-224 are covered by an addendum to the Final EIR entitled, "San José 2020 General Plan," and certified on August 16, 1994, by the City of San José City Council as Resolution No. 65459. The addendum that addressed project specific issues, was adopted on July 3, 2003.

STEPHEN M. HAASE, DIRECTOR
Planning, Building and Code Enforcement

Attachments:

- Proposed Draft Zoning Code Amendments (Attachment 1)
- Permit Amendment Order (Attachment 2)
- Existing Post Construction Urban Runoff Management Policy (Attachment 3)
- Letter from Myron Crawford, Berg & Berg Developers, Inc. dated 7/26/03 (Attachment 4)